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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,367	03/30/2004	Wei-Kuo Lee	DOW-31481-A	4720
29423	7590	08/18/2006	EXAMINER	
WHYTE HIRSCHBOECK DUDEK S.C. 555 EAST WELLS STREET SUITE 1900 MILWAUKEE, WI 53202				NGUYEN, CHAU N
		ART UNIT		PAPER NUMBER
		2831		

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/813,367  
Filing Date: March 30, 2004  
Appellant(s): LEE ET AL.

**MAILED**  
AUG 18 2006  
**GROUP 2800**

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Alan E. Wagner  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed May 31<sup>st</sup> 2006 appealing from the Office action mailed October 13<sup>th</sup> 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,717,505	DELPHIN et al.	01-1988
6,183,714	SMALLEY et al.	02-2001
4,857,232	BURNS, Jr.	08-1989

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delphin et al. (4,717,505) in view of Smalley et al. (6,183,714).

Delphin et al. discloses a composition comprising polyethylene (a), at least about 3 parts by weight, based on the weight of component (a), carbon fiber (b), and a conductive carbon black (c) other than the carbon fiber, the carbon black being present in an amount at least about 10 parts by weight, based on the weight of the component (a) (col. 3, lines 29-34) (re claims 1 and 7). Noted that the limitations following the term "optionally" are not positive limitations (re claim 1).

Delphin et al. does not disclose the composition comprising carbon nanotubes nor the composition being used to surround a conductor. Smalley et al.

discloses a composition comprising carbon nanotubes. Smalley et al. discloses that carbon nanotubes are useful as strengthening agents in any composite material or useful in combining with other forms of carbon such as carbon black (col. 3, lines 61-65). Accordingly, it would have been obvious to one skilled in the art to replace the carbon fiber with carbon nanotubes in the composition of Delphin et al. since it is taught by Smalley et al. that carbon nanotubes are useful as strengthening agents in any composite material or useful in combining with other forms of carbon such as carbon black. It would also have been obvious to one skilled in the art to use the composite of Delphin et al. to surround a conductor since the composition of Delphin et al. provides both electrical and mechanical properties.

The modified composition of Delphin et al. also discloses the component (c) being present in an amount of about 10 to about 100 parts by weight per 100 parts by weight of the component (a) (re claim 4), for each 100 parts of component (a), component (b) being present in an amount of about 3 to about 17 parts by weight, component (c) being present in an amount of about 10 to about 100 parts by weight, and the weight ratio of component (b) to component (c) being about 0.1:1.0 to about 10:1 (re claim 5).

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4. Claims 2, 3, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delphin et al. in view of Smalley et al. as applied to claim 1 above, and further in view of Burns, Jr. (4,857,232).

The combination of Delphin et al. and Smalley et al. discloses the invention substantially as claimed except for the component (a) being a copolymer of ethylene and an unsaturated ester which is vinyl esters, wherein the unsaturated esters is present in the ethylene/unsaturated esters copolymer in an amount of about 10 to about 55 percent by weight. Burns, Jr. discloses a composition comprising a copolymer of ethylene and an unsaturated esters (vinyl esters), wherein the unsaturated esters is present in the ethylene/unsaturated esters copolymer in an amount of about 10 to about 55 percent by weight (col. 2, lines 1-8). It would have been obvious to one skilled in the art to use the copolymer as taught by Burns, Jr. for the component (a) of Delphin et al. since this copolymer is well-known in the art for being used in polymeric shielding compositions.

#### **(10) Response to Argument**

Appellant alleges that an axiom of patent law is that an obviousness rejection can be rebutted by a showing of unexpected results. However, under the examiner's position, all properties of a new composition (that is rejected for

obviousness) are inherent in that composition and any properties, even if unexpected, would be merely a newly discovered advantage flowing naturally from the suggestion in the prior art. Consequently, evidence of unexpected results cannot be used to rebut an obviousness rejection.

Examiner would disagree. Secondary considerations such as unexpected results are considered on a case-by-case basis. In this particular application, the evidence of unexpected results presented by the appellant (specified in the disclosure) is not sufficient to rebut the examiner's *prima facie* case. As taught by Smalley et al. (col. 3, lines 61-65), carbon nanotubes are useful as strengthening agents in any composite material or useful in combining with other forms of carbon such as carbon black, therefore one skilled in the art would have desired to use carbon nanotubes in the composition of Delphin et al. to strengthen the composition. The fact that the composition taught by Delphin et al. and Smalley et al. comprises the same materials and the same amounts recited in the claims, the properties discovered by the appellant would flow naturally from the suggestion in the prior art.

In response to applicant's argument that the prior art would not lead one skilled in the art to expect the synergistic effects on melt viscosity and volume resistance achieved by using a blend of carbon nanotubes and carbon black, the

fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Furthermore, as shown in appellant's Tables 1 and 2, there are more than just the materials recited in the claims to constitute the properties of the composition.

**(11) Related Proceeding(s) Appendix**

No Related Appeals and Interferences is identified in the Brief. Examiner assumes that there is no Related Appeals and Interferences.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Chau N. Nguyen

Primary Examiner 2831

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